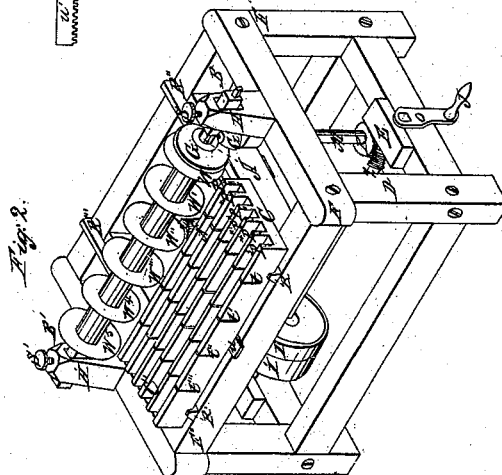
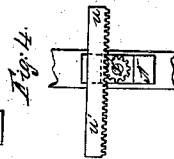
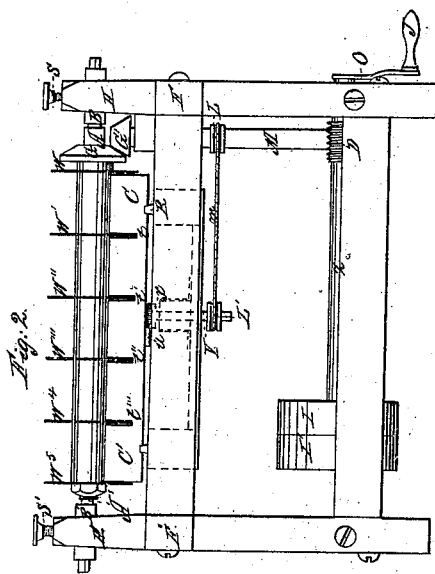
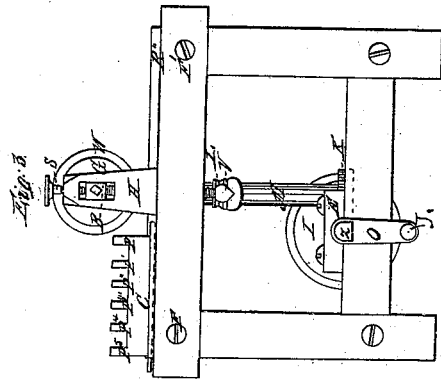


W. B. Vincent,

Bread Cutter.

N<sup>o</sup> 52,627.

Patented Feb/3, 1866.



Witnesses:

William L. Carson  
A. L. Berry

Inventor:

W. B. Vincent

# UNITED STATES PATENT OFFICE.

WILLIAM B. VINCENT, OF BOSTON, MASSACHUSETTS.

## MACHINE FOR CUTTING BREAD, SOAP, AND BLACK LEAD.

Specification forming part of Letters Patent No. 52,627, dated February 13, 1866.

### *To all whom it may concern:*

Be it known that I, WILLIAM B. VINCENT, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and Improved Machine for Cutting Bread, Soap, and Black Lead; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in a combination of a series of revolving cutting-wheels with a series of sliding troughs, into which the material to be cut is placed.

The function of the machine is to cut into pieces or bars any soft material, as stove-polish, soap, bread, &c.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In the drawings, Figure 1 is an isometrical perspective view, showing the machine entire. Fig. 2 is a side elevation of the machine. Fig. 3 is an end elevation of the machine. Fig. 4 is a plan showing the ratchet *u u'* and pinion X, which together form the device for moving the carriage C C' under the cutting-wheels W W' W''.

The frame F F' F'' of my machine may be made of wood or any suitable material. Bolted to this frame are the housings H H', which contain the boxes B B' in which the shaft A A' runs. To the shaft A A' are attached at regular intervals the cutting-wheels W W' W'', made of sheet iron or steel.

The shaft and cutting-wheels are made to revolve by a belt driving the pulley I', which, acting through the shaft Z and worm D, drives the pinion K, which, in its turn, by means of the shaft M, drives the pinion G', and thus the gear-wheel G attached to the shaft A A' of the cutting-wheels.

E is a box in which one end of the shaft Z runs.

C C' is a carriage, the upper surface of which consists of a series of grooves or troughs made

of any desired form and dimension, into which the material to be cut is put. The partitions P P' P'', forming the sides of these troughs, are cut through, as shown at *t t' t'' t'''*, at intervals, to correspond with the intervals between the cutting-wheels, so that the carriage may be passed forward and under the shaft of the cutting-wheels, upon the rails R R' and R' R''.

To the carriage is attached a ratchet, *u u'*, and upon the shaft Y is fixed a pinion, X, which meshes into the ratchet *u u'* when the carriage C C' is pushed forward, and carries it and the carriage under the cutting-wheels W W' W''.

The pinion X is driven by means of the belt *m*, which connects the pulleys L and L'.

The cutting-wheels W W' W'' are raised and lowered at will by means of two pairs of set-screws, one pair of which, S and V, is shown in Fig. 3. Of the other pair, at the other end of the shaft, only one of the screws, S', is shown.

The operation of the machine is this: The troughs of the carriage are filled with the material to be cut—black lead, stove-polish in a plastic state, bread, or soap, for instance—the carriage is pushed forward until the pinion X meshes into the ratchet *u u'*; then, the cutting-wheels being in motion, the machine becomes self-acting and the material in the troughs is cut into lengths corresponding to the intervals between the cutting-wheels, and the carriage is left in rear of the cutting-wheels ready to be taken away, emptied, and refilled for another operation.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination and arrangement of the cutting-wheels W W' W'' W''' with the sliding trough C C', made substantially as and for the purpose set forth.

WM. B. VINCENT.

Witnesses:

WILLIAM EDSON,  
A. HUN BERRY.